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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/780,618

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Martin Sommer

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EXAMINER

CHEVALIER, ALICIA ANN

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

11/01/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/780,618

Applicant(s)

SOMMER ET AL.

Examiner

Alicia Chevalier

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1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 30,31,33-51 and 53-70 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 30,31,33-51 and 53-70 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

RESPONSE TO AMENDMENT

1. Claims 30, 31, 33-51 and 53-70 are pending in the application, claims 1-29, 32 and 52 have been cancelled.
2. Amendments to the claims, filed on August 16, 2007 have been entered in the above-identified application.

REJECTIONS

3. **The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.**

Claim Rejections - 35 USC § 102

4. Claims 30, 31, 33-51 and 53-70 are rejected under 35 U.S.C. 102(b) as being anticipated by Christiansen (U.S. Patent No. 5,490,965), as evidenced by Hawley's Condensed Chemical Dictionary.

Christiansen discloses a molded element (*ceramic circuit board, col. 1, line 11*) that comprises brittle-fracture material (*ceramic substrate, col. 3, line 58*) with at least one opening (*col. 3, line 57*) that is sealed by a brittle-fracture sealing material consisting of glass, glass ceramic, or creamic (*ceramic paste, col. 3, line 55 and col. 4, lines 7-10*) which is hermetically sealed (*col. 4, line 6*) to said brittle-fracture material.

It is noted that Christiansen's paste before firing includes a ceramic filler and an alumina powder suspended in an organic carrier (*abstract*). However, after the seal paste is fired the

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organic carrier burns off leaving only a ceramic material which contains alumina (*col. 4, lines 3-19*). Furthermore, Christiansen points out that most ceramic substrates are made primarily of alumina (*col. 5, lines 5-7*), which is also supported by Hawley's Condensed Chemical Dictionary where it shows alumina is used in ceramics (*see definition of aluminum oxide, i.e. alumina*). Therefore, the final resulting sealing material will only be a material consisting of ceramic.

The limitation "wherein the brittle-fracture material and the sealing material are permanently bonded together by a pressure weld" is a method limitation and does not determine the patentability of the product, unless the process produces unexpected results. The method of forming the product is not germane to the issue of patentability of the product itself, unless Applicant presents evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. MPEP 2113. Furthermore, there does not appear to be a difference between the prior art structure and the structure resulting from the claimed method because Christiansen discloses that the brittle fracture material and sealing material are permanently bonded with a hermetic seal.

Christiansen discloses that the brittle-fracture material is glass, glass ceramic or ceramic (*col. 3, line 58*). Christiansen discloses that the sealing material has a plate, spherical, conical or cylindrical shape (*figure 1*). Christiansen discloses that the brittle-fracture material is a glass plate, and wherein the at least one opening has the shape of a through-going cylindrical opening or through-going conical opening (*figure 1*).

Regarding the limitation "wherein the brittle-fracture material and the sealing material are bonded by welding by movement" is a method limitation and does not determine the patentability of the product, unless the process produces unexpected results. The method of

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forming the product is not germane to the issue of patentability of the product itself, unless Applicant presents evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. MPEP 2113. Furthermore, there does not appear to be a difference between the prior art structure and the structure resulting from the claimed method because Christiansen discloses that the brittle fracture material and sealing material are bonded with a hermetic seal.

Regarding the limitation “wherein the brittle-fracture material and the sealing material are bonded by ultrasound weld, high-frequency weld, rotary weld, friction weld, torsional or orbital weld, cold pressure weld or abrasive weld” is a method limitation and does not determine the patentability of the product, unless the process produces unexpected results. The method of forming the product is not germane to the issue of patentability of the product itself, unless Applicant presents evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. MPEP 2113. Furthermore, there does not appear to be a difference between the prior art structure and the structure resulting from the claimed method because Christiansen discloses that the brittle fracture material and sealing material are bonded with a hermetic seal.

The limitation “wherein the brittle-fracture material and the sealing material are permanently bonded together by a cold pressure weld” is a method limitation and does not determine the patentability of the product, unless the process produces unexpected results. The method of forming the product is not germane to the issue of patentability of the product itself, unless Applicant presents evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. MPEP 2113. Furthermore, there does

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not appear to be a difference between the prior art structure and the structure resulting from the claimed method because Christiansen discloses that the brittle fracture material and sealing material are permanently bonded with a hermetic seal.

The limitation “wherein the brittle-fracture material and the sealing material are permanently bonded together by a diffusion weld” is a method limitation and does not determine the patentability of the product, unless the process produces unexpected results. The method of forming the product is not germane to the issue of patentability of the product itself, unless Applicant presents evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. MPEP 2113. Furthermore, there does not appear to be a difference between the prior art structure and the structure resulting from the claimed method because Christiansen discloses that the brittle fracture material and sealing material are permanently bonded with a hermetic seal.

The preamble “laminated glass system,” “an electrochromic” and “mirror” is deemed to be a statement with regard to the intended use and is not further limiting in so far as the structure of the product is concerned. In article claims, a claimed intended use must result in a ***structural difference*** between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. MPEP § 2111.02. Furthermore, the new limitations in claims 53, 55 and 56 merely modify the intended use and are not positively recited as a combination.

ANSWERS TO APPLICANT'S ARGUMENTS

5. Applicant's arguments in the response filed August 16, 2007 regarding the 35 U.S.C. 102(b) rejection over Christiansen reference of record have been considered but are unpersuasive.

Applicant argued that the excerpt from the book titled Principles of Welding, Processes, Physics, Chemistry demonstrated the effect on the structure of the materials bonded by a variety of welding techniques. Applicant further argued that the structures of the products obtained by differing welding processes are different.

The Examiner has read the excerpt from Principles of Welding, Processes, Physics, Chemistry. However, as pointed out in the office action, method limitations, such as "bonded together by a pressure weld," do not determine the patentability of the product, unless the process produces **unexpected results**. The method of forming the product is not germane to the issue of patentability of the product itself, unless Applicant presents **evidence** from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. MPEP 2113.

The excerpt from Principles of Welding, Processes, Physics, Chemistry discusses different types of welds but does not discuss why one is better than the other or what unexpected results would occur in brittle fracture material in regard to each type of weld.

Applicant argues that Christiansen fails to disclose an opening which has a through-going cylindrical or conical opening. The examiner stated in the rejection that figure 1 shows this limitation. Applicant has failed to specifically point out how the reference does not teach this limitation.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Chevalier whose telephone number is (571) 272-1490. The examiner can normally be reached on Monday through Friday from 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye, can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ac

10/28/07


ALICIA CHEVALIER
PRIMARY EXAMINER